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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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| 08/813,200 | 03/07/97 | HIRANO | M 2342-0107P |

MM21/0312
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| EXAMINER |
|-------------|
| DIETRICH, M |

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2814 | |

DATE MAILED: 03/12/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/813,200

Applicant(s)

Hirano

Examiner

Mike Dietrich

Group Art Unit

2814



☒ Responsive to communication(s) filed on Feb 22, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-26 is/are pending in the application.

Of the above, claim(s) 20-26 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-9, 12-15, 17, and 19 is/are rejected.

☒ Claim(s) 10, 11, 16, and 18 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Title

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The following title is suggested: Substrate Processing Apparatus With Exhaust Means For Removing Containments.

Election/Restriction

3. Claims 20-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention. Election was made **without** traverse in Paper No. 7.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 14, 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 discloses "a flexible exhaust pipe," flexible is vague and indefinite.

Claim 17 discloses "load lock chamber at the side of region" is unclear where the gas supply and chamber exhaust are located.

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-9, 12-15, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Saeki.

Saeki shows chamber 7 that contains gas supply line 10 and exhaust line 9 and a load lock chamber 1 containing gas supply line 3, exhaust line 2 and moving mechanism 6. Exhaust line 2 is capable of removing contaminating particles from the load lock chamber and is connected to vacuum pump 23. In re claims 2-4, 6 and 7, the gas lines 3/10 and exhaust lines 2/9 are regulated by a controlling apparatus that is not shown (see col 5 lines 50-51). It is inherent that the controlling apparatus that is not shown of Saeki would have used detecting devices and regulators to control the different pressure settings for chamber 7 and load lock chamber 1. In re claim 5, the load lock chamber 1 and chamber 7 have means to set the pressure to a normal pressure (col 6 lines 66-67), which is equal to the atmospheric pressure. When the load lock chamber 1 is opened to receive another wafer, the pressure between load lock chamber 1 and platform 17 that holds the wafers are equal (col 5 lines 55-60). In re claims 8 and 9, it is inherent that the exhaust line 2 is regulated by the controlling apparatus and is used for creating a pressure in the load lock chamber 1 that is equal to the atmospheric pressure.

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Allowable Subject Matter


8. Claims 10, 11, 16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Mike Dietrich** at **(703) 305-0381** and between the hours of 8:00 AM to 4:00PM (Eastern Standard Time) Monday through Friday or by E-mail via **Michael.Dietrich@uspto.gov**. The Art Unit 2814 Fax Center number is **(703) 308-7722; -7724**. Primary Examiner **Don Monin** can be reached at **(703) 308-4895**. Any inquiry of a general nature or relating to the status of this application should be directed to the **Group 2800 Receptionist** at **(703) 308-0956**.

Michael Dietrich

MD
03/03/99


Donald L. Monin, Jr.
Primary Examiner